

Missouri Education Technology Strategic Plan: 2007-2011



“Making a Positive Difference Through Education and Service”
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2007 Missouri Education Technology Strategic Plan

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INTRODUCTION

The 2007-11 Missouri Education Technology Strategic Plan (METSP), adopted by the State Board of Education in February 2007, is intended to serve as a road map to assist districts in integrating technology effectively and efficiently. Each district has the mission to provide safe, conducive learning environments for students as they develop the knowledge, skills, and abilities necessary to graduate and be successful in their post-secondary employment, training, and education endeavors – and technology has a critical role in the district's administrative and instructional programs. For successful and seamless integration of technology, districts must establish policy and procedures and detailed action plans. The state plan is intended to be a resource in guiding and facilitating local technology planning, funding, implementation, and evaluation. The plan helps the Department of Elementary and Secondary Education (DESE) identify and direct technology resources to empower teaching and learning across the state.

This five-year plan builds on efforts and successes of the 2002-06 state plan and incorporates new and emerging ed-tech programs such Missouri's Mathematics, Engineering, Technology, and Science (METS) Initiative and the Partnership for 21st Century Schools (P21) Framework. The plan was created with assistance from a leadership committee, five working groups, and input from hundreds of Missouri educators through wiki participation, presentations, email and Newsline requests for feedback, and a direct mailing to schools in August 2006.

The 2007 METSP presents eight major recommendations for DESE to take in helping districts use technology effectively and efficiently. The recommendations are based on *Vision and Mission Statements* and are organized around the following five *Goals*:

- S** - Student Learning
- T** - Teacher Preparation
- A** - Administration, Data Management, Communications
- R** - Resource Distribution
- T** - Technical Support

These goals or desired outcomes are predicated on a set of *Essential Conditions* and measured by *Evidence of Success* statements that describe characteristics of successful district programs. The *Major Implementation Strategies* and *Action Plans* direct specific DESE actions and inputs. Measurable objectives with baseline data and targets are detailed in the *Status Report*.

METSP is a living document that is reviewed and revised regularly. DESE tracks progress toward meeting goals and objectives through analyses of data collected via the Core Data Collection System, including the Census of Technology (COT), the Missouri School Improvement Program (MSIP), and participation in state and federal programs that advance teaching and learning through the use of technology. While it is unlikely that all districts will be able to meet all objectives by the same end dates, tracking and reporting state-level data helps DESE and districts gauge effectiveness of state and local planning efforts.

Districts are encouraged to provide feedback and share their proven practices. The leadership planning team is investigating a website, portal, or other mechanisms to cite multiple and varied examples of successful implementation strategies at the local level. Districts can submit their successful practice information and/or refer feedback and questions relating to this plan to the DESE Instructional Technology section (see contact information in the footer).

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EXECUTIVE SUMMARY

Background

The Department of Elementary and Secondary Education (DESE) is required to have an approved long-range education technology plan. The first state technology plan was created in 1996 in response to requirements under the Improving America's Schools Act. This plan presented a set of recommendations for effective use of technology in Missouri's districts and highlighted programs and services in place to help support districts.

The state education technology plan was revised in 1997 to incorporate requirements under the Technology Literacy Challenge Fund Act and the U.S. Department of Education's (ED) four technology pillars: computers in classrooms, classrooms connected to the Internet, teacher proficiency in using technology, and teachers and students using technology hardware and software to support rigorous content. The 1997 plan consisted of five major goals (addressing partnership development in addition to the four pillars) and 21 objectives. The Missouri Census of Technology was developed to collect the data used to track progress toward meeting the goals and objectives.

In 2002, a new five-year plan was developed to meet the "15 points" required under the new Title II.D "Enhancing Education through Technology" program enacted by the No Child Left Behind Act. The 2002-2006 plan was developed to meet national plan requirements, to address strengths and weaknesses of the 1997 plan, to help provide a framework that would guide effective district technology planning and implementation. The hallmark of the 2002 plan was development of Missouri's five Technology Focus Areas (TFAs), addressing Student Learning, Teacher Preparation, Administration and Data Management, Resource Distribution, and Technical Support. The 2002 plan included five major goals (the TFAs) and 15 objectives. The objectives delineated what was expected at the state, district, building, and classroom level. The Census of Technology was revised to address the new goals and objectives.

The new five-year plan for 2007-11 builds on the strengths and weaknesses of the 2002 plan, incorporate ED's "15 points" and tries to address new opportunities and challenges that are in place in schools of today and tomorrow. [To review the 2002-06 plan and its final status report, see: <http://dese.mo.gov/divimprove/instrtech/techplan/>.]

Plan Fundamentals

A review of the 2002-06 plan indicated several areas of strengths and weaknesses. The major areas of strengths included Missouri's Show-Me Standards, Missouri Assessment Program, and the Missouri School Improvement Program that promote high levels of learning; the creation of National Educational Technology Standards; the variety of data made available to schools for feedback and needs analyses; state support of high-quality professional development and the regional professional development centers; and, the

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array of programs and services that promote and support district access to and usage of technology (such as the MOREnet Technology Network Program, the eMINTS professional development programs, and the Technology Leadership Academies).

Areas of weaknesses included some inequities in place within and across districts in terms of technology support and usage. Districts varied in technology-related leadership, financial, technical and instructional support structures. Many administrators and teachers still had beginner skills in using technology. And quality professional development such as eMINTS is not easily accessed and can be very costly.

In addition, the committees identified opportunities and outside pressures that have surfaced since 2002 and/or are projected to occur in the next five years. These include recent adoption of the new high school graduation requirements that promote rigorous content that can be enhanced or made available through the use of technology; the newly enacted Missouri Virtual Instructional Program; new programs such as “e-Learning for Educators” that provides Missouri teachers with quality online professional development; and, the Partnership for 21st Century Schools (P21) and Governor Blunt’s METS (mathematics, engineering, technology, and science) initiative that respond to recent concerns about global competitiveness.

Specifically, the Partnership for 21st Century Schools (P21) Framework consists of the key elements listed below. For additional information about P21 and its implementation in states across the U.S., see: <http://www.21stcenturyskills.org/>.

- high-profile leadership
- broad consensus and shared vision
- ongoing professional development in 21st century skills
- standards and curriculum aligned with 21st century skills
- 21st century assessments
- effective communication strategy
- aggressive implementation strategy

The Missouri METS (math, engineering, technology, and science) Initiative presents the recommendations listed below. To read the full report and for additional information on the METS Alliance, see: <http://www.missourimets.com>.

- improve performance of all P21 students
- expand pool of students motivated to pursue METS careers
- expand pool of Missouri’s quality P-20 METS educators
- establish technology plan to support METS curricula, Grade-Level Expectations (GLEs), and assessments in Missouri
- increase public awareness of the value of METS for all Missouri citizens, and importance of METS-related industries and jobs to enhance Missouri’s global competitiveness and innovation

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Planning Process

The 2007-11 METSP was developed with assistance and input from over 100 Missouri educators. The planning process and the written document follow the essential elements of a Comprehensive School Improvement Plan, as detailed by MSIP Standard 8.2 and which include: description of the planning process; mission statement, belief, and vision statement; data analysis and gap analysis to identify strengths and weaknesses; goals, outcomes, or objectives; strategies and action steps; and timeline and responsibility (roles) of implementation and evaluation.

In spring 2005, the Department's Instructional Technology partnered with SuccessLink to oversee development of the 2007. SuccessLink designed and supported an online content management website (wiki) and had staff serve on the steering committee and planning sub-committees. Instructional Technology staff facilitated the planning process through general communication and oversight, soliciting educator input, managing meetings and conference calls, and coordinating planning drafts and revisions.

The steering committee was comprised of SuccessLink and Instructional Technology staffs and 10 district and university educators serving as leaders of the five planning sub-committees. Sub-committees were assigned to work with one of the five Technology Focus Areas (TFAs).

The following outlines the process and timeline used in developing and finalizing the plan.

- February 2005 – SuccessLink agreed to partner with Instructional Technology in overseeing plan development; staffs created initial work plan and identified potential planning sub-committee leaders and members; SuccessLink created wiki website
- March 2005 – oversight committee was formed consisting of Instructional Technology staff, SuccessLink staff, and the TFA team leaders
- May 2005 through July 2006 – steering and planning committees met via face-to-face meetings, conference calls, and email/wiki correspondence; feedback was encouraged and facilitated through the use a wiki, email, *Newsline* updates, and direct school mailings
- August 2006 – based on feedback received, a draft of the plan was mailed to school administrators for 30-day comment period
- October 2006 – steering committee met to review feedback received during the 30-day comment period and revised plan accordingly; revised draft was posted on wiki and Instructional Technology websites; Instructional Technology presented draft obtained further feedback via presentations to education technology groups and MOREnet's Instructional Technology Conference (MITC) pre-conference session

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2007 Plan Components

The two concerns most commonly expressed by district leaders before, during, and after the comment periods involved the wording of objectives that started with “Districts shall...” or “Districts will...” and a lack of necessary resources. The steering committee agreed to reformat the draft so that, instead of district goals and objectives, the 2007 presents eight major recommendations for the Department to help districts use technology effectively and efficiently. The recommendations are based on:

- Essential Conditions: characteristics of successful technology integration and implementation
- Department goals: desired outcomes, based on the five TFAs
- Evidence of Success: characteristics of districts/schools with successful programs
- Action Plans: strategies for what the Department will do, with assistance from key stakeholders and partners, in helping districts realize goals
- Plan Format: include in the final draft lists of the planning team members, a glossary of terms and acronyms, and examples of proven/effective practices

Major Recommendations

In essence, the 2007-11 Missouri Education Technology Strategic Plan calls for the Department of Elementary and Secondary Education to act on eight recommendations, centered on the five TFAs, that will assist districts in using technology effectively and efficiently.

The Department will:

1. assist districts in integrating technology into the curriculum and implementing effective research- and inquiry-based instructional strategies, such as the eMINTS instructional model or equivalent, that address student achievement and 21st Century learning
2. assist and support districts in adopting or adapting the NETS*S achievement rubrics or equivalent to promote and monitor student technology literacy
3. partner with key stakeholders to assist districts in using and supporting high quality pre-service and in-service professional development that furthers knowledge, skills, and abilities of educators and assists them in integrating technology into curriculum and inquiry-based instructional strategies
4. assist and support districts in adopting or adapting the NETS*T and NET*A achievement rubrics or equivalent to promote and monitor educator technology literacy
5. assist and support districts in developing and implementing comprehensive local technology plans that support comprehensive school improvement plans
6. assist and support districts in developing policies and procedures for effective use of technology for administration, data management, and communication systems
7. assist districts in establishing and supporting equitable resources
8. assist and support districts in providing sufficient and qualified personnel to provide technical and instructional technology support

VISION and MISSION STATEMENTS

Vision

Planning committee members envision a technology enriched learning community, not confined by time or space, which empowers all students to achieve academic success in the 21st century.

As:

Students engage in technology enriched curricula which promotes inquiry-based, hands-on learning. Students take responsibility for their own education success.

Teachers embrace effective techniques to integrate technology throughout the curricula for use by all students, and pursue life-long technology learning.

Administration provides foundational support for teacher integration of technology, appropriate and consistent funding for technology resources, professional-development opportunities, technology-derived data and research –based decisions, and enhanced communication systems supporting instructional and administrative processes.

Resources to facilitate technology use are equitably distributed and available to be used by all students, teachers, staff, and administrators to promote academic achievement.

Technical support and instructional technology staff are adequately funded and readily available to support all education and administration processes.

As Students, Teachers, Administration, Resources, and Technical Support interconnect to achieve this Vision, the result is a generation of adults who successfully live, work, and participate in our rapidly changing, information-based society.

Mission

The mission of the state education technology strategic plan is to create a technology enriched learning community, not confined by time or space, which empowers all students to achieve academic success in the 21st century.

ESSENTIAL CONDITIONS

The role of the Missouri Department of Elementary and Secondary Education (DESE) is to serve districts, as they establish and implement the conditions essential for successful teaching and high student academic achievement. Successful district programs, that graduate students with the knowledge, skills, and abilities that ensure their being successful in the 21st Century, require:

- visionary leadership
- strategic long-range plans
- secure and adequate technology budget
- established policies and procedures
- rigorous academic curricula
- well-defined technology integration standards
- high-quality professional development for all educators
- robust administration, data management, and communication systems
- variety of readily accessible resources
- tools for diverse learners
- highly skilled instructional and technical support staff
- continuous investigation of the challenges and opportunities

In short, successful education programs ensure graduates' success in the 21st Century through the use of technology in support of personal, academic, and career goals for district students and their educators.

STATE RECOMMENDATIONS

The Missouri Education Technology Strategic Plan for 2007-11 directs The Department to take certain steps that support and promote these essential conditions. The Department should:

- S₁** assist districts in integrating technology into the curriculum and implementing effective research- and inquiry-based instructional strategies, such as the eMINTS instructional model or equivalent, that address student achievement and 21st Century learning
- S₂** assist and support districts in adopting or adapting the NETS*S achievement rubrics or equivalent to promote and monitor student technology literacy
- T₁** partner with key stakeholders to assist districts in using and supporting high quality pre-service and in-service professional development that furthers knowledge, skills, and abilities of educators and assists them in integrating technology into curriculum and inquiry-based instructional strategies
- T₂** assist and support districts in adopting or adapting the NETS*T and NET*A achievement rubrics or equivalent to promote and monitor educator technology literacy
- A₁** assist and support districts in developing and implementing comprehensive local technology plans that support comprehensive school improvement plans
- A₂** assist and support districts in developing policies and procedures for effective use of technology for administration, data management, and communication systems
- R₁** assist districts in establishing and supporting equitable resources
- TS₁** assist and support districts in providing sufficient and qualified personnel to provide technical and instructional technology support

GOALS, EVIDENCE OF SUCCESS, IMPLEMENTATION STRATEGIES, PLANS

(S) Student Learning

Goal

All Missouri students will engage in rigorous instruction driven by technology-enriched curricula to realize high levels of academic achievement and performance that fosters life-long learning.

Evidence of Success

Districts with successful programs have certain characteristics. A successful district enhances student learning by:

- **embedding educational technology standards in local curriculum**
 - the National Educational Technology Standards for Students (NETS*S) or equivalent have been adopted or adapted and aligned with local curriculum and the Show-Me Performance and Content Standards and Grade-Level Expectations (GLEs)
- **implementing a research- and inquiry-based instructional model throughout the curricula**
 - students participate in inquiry-based instructional strategies such as those promoted by the eMINTS program or equivalent
 - curriculum resources are used to inspire educators to use research-based instructional strategies that are powered by technology and engage diverse learners in the excitement of learning through student-centered, collaborative, project-based, and inquiry-based activities, and promote research, problem solving and communication, resulting in improved student performance
- **using technology to deliver instruction and to monitor and assess learning**
 - technology is used to extend and support student learning beyond the school day
 - technology is used to expand student access to rigorous courses (distance learning)
 - technology tools are used to monitor student progress, including use of technology-based assessments in providing immediate feedback, and drive curricular and instructional changes
- **utilizing technology in developing students' 21st century skills**
 - technology integration promotes learning of 21st century skills, as defined by the Framework for 21st Century Learning
 - technology is used to enable/enhance career and post-secondary planning
 - NETS*S achievement rubrics or equivalent are used to regularly monitor student technology literacy (e.g., grades 2, 5, 8 and prior to graduation) to drive curricular change and meet technology literacy requirements under the No Child Left Behind Act (NCLB)

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Major Implementation Strategies (MIS)

The Department of Elementary and Secondary Education will:

- S 1** assist districts in integrating technology into the curriculum and implementing effective research- and inquiry-based instructional strategies, such as the eMINTS instructional model or equivalent, that address student achievement and 21st Century learning
- S 2** assist and support districts in adopting or adapting the NETS*S achievement rubrics or equivalent to promote and monitor student technology literacy

Action Plan

Unless otherwise stated, action steps refer to work on the part of DESE personnel and partnering agencies and programs to assist districts in meeting state (and local) education technology goals. Please refer to the appendices for listing of acronyms, programs, and agency/organization partners.

S DESE Action Step	Begin Date	End Date	Examples	Partners
Target funding (state, federal, other) to support state and district technology planning, implementation, and evaluation	ongoing		DESE development of electronic planning tool, ePeGS, that 1) helps districts tie together all major planning efforts, 2) focuses on needs assessment data and school improvement, and 3) will help tie funding to goals and objectives	Districts, key stakeholders, and partnering agencies
Support educators in writing and implementing model curriculum units that integrate information and technology skills	7-06	on-going	Continued training and work to integrate information and technology literacy into the DESE model curriculum units	eMINTS National Center, eMINTS classroom teachers, library media specialists, classroom teachers, instructional technology specialists, curriculum consultants, Regional Instructional Facilitators, SMCAA, RPDCs, and professional development organizations
Disseminate information and effective practices	ongoing		Present information via face-to-face and/or videoconference, and disseminate presentations, documents, and best practices via conference sessions, workshops, newsletters, Internet, and other avenues	MITC, METC, MASL, Interface, and other appropriate venues, <i>Newsline</i> articles
Partner with others to support the use of technology to extend student learning beyond the school day	7-06	on-going	Missouri Virtual Instruction Program (MoVIP), MSU's Missouri Virtual School, MU High School	Districts, programs and services such as Project Lead the Way, A+ Schools, eMINTS, eThemes, CSD ACT Prep

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S DESE Action Step	Begin Date	End Date	Examples	Partners
Continue to support growth of inquiry-based instructional model (such as eMINTS) within and across districts				
Target funds (state, federal, other) to support district efforts to implement and expand inquiry-based instructional projects	ongoing			
Target funds to support eMINTS implementation and expansion efforts	ongoing			eMINTS National Center, instructional specialists, funded districts
Continue grant structures which promote major effective implementation projects	ongoing		Competitive grant requirements on district teaming for building, implementing, and evaluating implementation projects (such as eMINTS)	eMINTS National Center, funded districts
Disseminate information and effective practices	ongoing		Present information via face-to-face and/or videoconference, and disseminate presentations, documents, and best practices via conference sessions, workshops, newsletters, Internet, and other avenues	MITC, METC, MASL, Interface, and other appropriate venues, <i>Newsline</i> articles, eMINTS National Center, funded districts, evaluation teams
Support district use of technology to enable and enhance career and post-secondary planning	7-06	on-going		Division Career Education, UMC/IML, MSCA, MoVIP, eLearning, Project Lead the Way, A+ Schools, MoACTE, districts
Continue to support use of rigorous curriculum and high school graduation requirements in traditional and alternative learning environments, through technologies	ongoing		Present information related to virtual education, assistive technology, and digital instructional resources	MoVIP, High Schools that Work, Project Lead the Way, eMINTS National Center, A+ Schools, MoDLA, MRDP
Support and promote use of performance-based evaluation of tools and users	10-06	on-going	Embed use of technology in classroom observations conducted for MSIP, annual evaluations (PBTE), etc. Develop tools for collecting, evaluating, and reporting observation findings (e.g., electronic evaluation tools)	School Improvement Program, RPDCs, districts, Teaching and Learning Institute, OSEDA Technology Literacy Initiative, Hallmarks of an Effective eMINTS Classroom, PBTE, PBLMSE, PBCE, SuccessLink, Leadership Academy, STARR Teachers, Regional Instructional Facilitators

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S DESE Action Step	Begin Date	End Date	Examples	Partners
Continue to partner with quality professional development providers to offer effective instructional strategies	ongoing		Identify quality providers and programs. Extend breadth and scope of offerings to include technology-mediated solutions (distance learning and assistive technology)	RPDCs, eMINTS National Center, CSD, PBS stations, eLearning for Educators: Mo Project, Teaching and Learning Institute, Southwest Center for Excellence, MoDLA, MRDP, MoVIP
Continue to support and promote educator use of technology to assess and monitor student learning, differentiate instruction, and to communicate expectations, goals, and progress to students, parents, and community	ongoing			RPDCs, Leadership Academy, eMINTS National Center, STARR Teachers, Regional Instructional Facilitators, ISTE, COSN, SETDA
Adopt/adapt NETS*S, NETS*T, and NETS*A achievement rubrics	7-07	12-07		State Board, districts, ISTE
Continue to support district implementation of responsible and safe use of technology	ongoing			
Develop and provide assistance in implementing NETS*S assessment tools to evaluate student literacy in grades 2, 5, 8, and prior to graduation	10-06	7-07		OSEDA Technology Literacy Initiative and pilot districts, SETDA, ISTE, NCREL
Assist in the development and review of technology plans to determine district use of technology literacy assessment to measure progress, and drive curricular and/or professional development changes	ongoing		Create forum for discussing district interest in state measurements to assess technology literacy skills of students, teachers, administrators, support staff, etc.	Technology plan trainers, leaders, and readers
Continue to collect, analyze, and report data to monitor state technology plan progress and drive change (Census of Technology, program records, etc.)	ongoing			District contact persons, program coordinators

GOALS, EVIDENCE OF SUCCESS, IMPLEMENTATION STRATEGIES, PLANS

(T) Teacher Preparation

Goal

All Missouri teachers will implement technology-enriched curricula, research-based instructional strategies, and effective integration of instructional technology systems to realize high levels of academic achievement.

Evidence of Success

Districts with successful programs have certain characteristics. A successful district enhances teacher preparation by:

- **establishing technology standards for educators (teachers and administrators)**
 - the National Educational Technology Standards for Teachers and Administrators (NETS*T and NETS*A) or equivalent have been adopted or adapted and are established in the district's hiring practices and performance evaluations
- **implementing an inquiry-based instructional model throughout the curricula**
 - educators are prepared to implement inquiry-based instructional strategies such as those promoted by the eMINTS program or equivalent
 - teachers use curriculum and instructional resources in delivering instructional strategies that are powered by technology and engage diverse learners in the excitement of learning through student-centered, collaborative, project-based, and inquiry-based activities, and promote research, problem solving and communication, resulting in improved student performance
 - district provides in-class instructional support and assistance in integration of technology throughout the curricula
 - technology is used to provide student access to rigorous courses (distance learning)
- **using technology to deliver instruction and to monitor and assess learning**
 - educators are prepared to use technology to provide student access to rigorous courses (through distance learning, for example)
 - technology is used to track and monitor student progress, including use of technology-based assessments in providing immediate feedback, and drive curricular and instructional changes
- **using technology to deliver instruction and to monitor and assess professional development**
 - educators are provided with high-quality professional development that is powered by technology (such as, but not limited to, interactive white boards, handhelds, distance learning)
 - professional development addresses use of district-adopted tools that help educators set personal and academic goals, including technology integration skills

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- technology is used to provide access to rigorous graduate coursework and professional development workshops (online professional development, for example)
- professional development promotes highly-qualified educators and meets high-quality professional development standards, as required under NCLB
- **using technology in assessing and developing educator technology literacy**
 - the NETS*T and NETS*A achievement rubrics or equivalent are used to monitor educator technology literacy and drive professional development change and meet goals established by NCLB
 - educators are provided access to instructional technology support such as, but not limited to, personnel, multimedia and print resources, and online classes

Major Implementation Strategies (MIS)

The Department of Elementary and Secondary Education will:

- T 1** partner with key stakeholders to assist districts in using and supporting high quality pre-service and in-service professional development that furthers knowledge, skills, and abilities of educators and assists them in integrating technology into curriculum and inquiry-based instructional strategies
- T 2** assist and support districts in adopting or adapting the NETS*T and NET*A achievement rubrics or equivalent to promote and monitor educator technology literacy

Action Plan

Unless otherwise stated, action steps refer to work on the part of DESE personnel and partnering agencies and programs to assist districts in meeting state (and local) education technology goals. Please refer to the appendices for listing of acronyms, programs, and agency/organization partners.

T DESE Action Step	Begin Date	End Date	Examples	Partners
Target (state, federal, other) funds to support state and district technology planning, implementation, and evaluation	ongoing			Districts, key stakeholders, and partnering agencies
Support educators in writing and implementing model curriculum units integrating information and technology skills	7-06	on-going		eMINTS National Center, eMINTS teachers, library media specialists, classroom teachers, ed-tech specialists, curriculum consultants, Regional Instructional Facilitators, SMCAA, RPDCs, and professional development organizations

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T DESE Action Step	Begin Date	End Date	Examples	Partners
Present information via face-to-face and/or videoconference, and disseminate presentations, documents, and best practices via conference sessions, workshops, newsletters, Internet, and other avenues	ongoing			MITC, METC, MASL, Interface, and other appropriate venues, <i>Newsline</i> articles
Support implementation of inquiry-based instruction in districts				
Promote funding of grant programs (formula and competitive) that support district implementation of inquiry-based instructional projects	ongoing			
Continue grant structures that promote district teaming for building, implementing, and evaluating projects	ongoing			
Disseminate information of best practices via presentations, newsletters, and other avenues	ongoing			MITC, METC, MASL, Interface, and other appropriate venues, <i>Newsline</i> articles, funded districts, evaluation teams
Continue to support growth of eMINTS instructional model within and across districts				
Target state and federal funds to support eMINTS implementation and expansion efforts	ongoing			eMINTS National Center, instructional specialists, funded districts

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T DESE Action Step	Begin Date	End Date	Examples	Partners
Continue grant structures that require and support district teaming for building, implementing, and evaluating eMINTS implementation projects	ongoing			eMINTS National Center, funded districts
Disseminate information of best practices via presentations, newsletters, and other avenues	ongoing			MITC, METC, MASL, Interface, and other appropriate venues, <i>Newsline</i> articles, eMINTS National Center, funded districts, evaluation teams
Continue to research eMINTS impact data of diverse learners	ongoing			eMINTS National Center, funded districts, evaluation teams, Speech to Text project (Division Special Education)
Continue to support use of rigorous curriculum and high school graduation requirements in traditional and alternative learning environments, through technologies	ongoing		Present information on virtual education, assistive technology, and digital instructional resources	MoVIP, High Schools that Work, Project Lead the Way, eMINTS National Center, A+ Schools, MoDLA, MRDP
Support and promote use of performance-based evaluation of tools and users	10-06	on-going	Embed use of technology in classroom observations conducted for MSIP, annual evaluations (PBTE), etc. Develop tools for collecting, evaluating, and reporting observation findings (e.g., electronic evaluation tools)	School Improvement Program, RPDCs, districts, Teaching and Learning Institute, OSEDA Technology Literacy Initiative, Hallmarks of an Effective eMINTS Classroom, PBTE, PBLMSE, PBCE, SuccessLink, Leadership Academy, STARR Teachers, Regional Instructional Facilitators
Continue to partner with quality professional development providers on effective instructional strategies, including technology mediated solutions (distance learning and assistive technology)	ongoing			RPDCs, eMINTS National Center, CSD, PBS stations, eLearning for Educators: Mo Project, Teaching and Learning Institute, SW Ed Tech Center - Webb City, MoDLA, MRDP, MoVIP

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T DESE Action Step	Begin Date	End Date	Examples	Partners
Continue to support/promote educator use of technology to assess and monitor student learning, differentiate instruction. Communicate expectations, goals, and progress to students, parents, and community	ongoing			RPDCs, Leadership Academy, eMINTS National Center, STARR Teachers, Regional Instructional Facilitators, ISTE, COSN, SETDA
Adopt/adapt NETS*S, NETS*T, and NETS*A achievement rubrics	7-07	12-07		State Board, districts, ISTE
Continue to support district implementation of responsible and safe use of technology	ongoing		Inform and train teachers in safe and effective use. Promote NetSmartz and iSAFE programs.	iSAFE, (Missouri Safe Schools/RPDCs), NetSmartz (MOREnet), ISTE, COSN
Develop and provide assistance in implementing NETS*S assessment tools to evaluate student literacy in grades 2, 5, 8, and prior to graduation	10-06	7-07		OSEDA Technology Literacy Initiative and pilot districts, SETDA, ISTE, NCREL
Assist in development and review of technology plans to determine district use of technology literacy assessment to measure progress, and drive curricular and/or professional development changes	ongoing			Technology plan trainers, leaders, and readers
Work with partners to promote adoption/adaptation of NETS*T and NETS*A in state teacher education programs, and to drive review and revision of accreditation standards	ongoing			Department of Higher Education, Institutes of Higher Education (Teacher Education Programs), Leadership Academy, Certification and Accreditation entities (such as MACTE and MACE), ISTE, NCREL
Continue to collect, analyze, and report data to monitor state technology plan progress and drive change (Census of Technology, program records)	ongoing			District contact persons, program coordinators

GOALS, EVIDENCE OF SUCCESS, IMPLEMENTATION STRATEGIES, PLANS

(A) Administration, Data Management, Communications

Goal

All Missouri districts will implement effective and efficient administration, data management, and communication processes through the use of technology and further support teaching and learning.

Evidence of Success

Districts with successful programs have certain characteristics. A successful district enhances administration, data management, and communication by:

- **having a comprehensive, long-range plan for using technology**
 - district maintains a broad, diverse committee that oversees technology planning, implementation, and evaluation
 - committee reviews plan regularly (at least once a year) to monitor progress and drive improvements
- **having administrative, data management, and communication policies/procedures**
 - district planning committee establishes, adopts, or adapts policy and procedures for effective, efficient, safe, and secure use of technology tools and resources (such as, but not limited to, network security, risk assessment, disaster recovery, distance learning, acceptable use, mobile security for handhelds, wireless network)
 - committee establishes essential hardware, software, connectivity, resource distribution, and technical support standards (such as, but not limited to, adequate bandwidth where typical, every-day use does not exceed 70% of capacity, Gartner Group Business Standards, replacement cycle)
- **establishing secure, adequate technology budget**
 - funding is earmarked (e.g., line item) for technology, using a set percentage rate of the overall budget or a per-pupil expenditure sufficient to cover TCO (total cost of ownership for connectivity/infrastructure; acquisition, maintenance/upkeep, replacement/expansion; software; facility/infrastructure; recovery and security systems; training and support)
 - budget policy addresses technology support (district personnel or contracted service)
 - budget policy allocates 25% of the technology budget for professional development activities including effective use of evaluation systems
 - local technology budget is extended through E-Rate discounts for approved services

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- **providing and supporting appropriate technology administrative systems**
 - district establishes infrastructure with robust systems that help improve efficiency and productivity of managerial and administrative tasks (such as networking, Internet connectivity, etc.)
- **providing and supporting appropriate data management tools**
 - appropriate technology tools are used to facilitate information and data collection and storage, analysis, and reporting (such as, but not limited to, comprehensive student information systems)
- **providing and supporting appropriate communication tools**
 - district determines appropriate tools to be supported and used to promote two-way communication within the community (such as websites, blogs, email, podcasts, autodialers, voice mail, online surveys, etc.)

Major Implementation Strategies (MIS)

The Department of Elementary and Secondary Education will:

- A 1** assist and support districts in developing and implementing comprehensive local technology plans that support comprehensive school improvement plans
- A 2** assist and support districts in developing policies and procedures for effective use of technology for administration, data management, and communication systems

Action Plan

Unless otherwise stated, action steps refer to work on the part of DESE personnel and partnering agencies and programs to assist districts in meeting state (and local) education technology goals. Please refer to the appendices for listing of acronyms, programs, and agency/organization partners.

A DESE Action Step	Begin Date	End Date	Examples	Partners
Target (state, federal, other) funds to support district technology budgets (supporting district and state infrastructure and TCO, and local, state, and national standards)	ongoing			Districts
Work with districts to promote line item budget, per pupil, etc.	1-07	7-11		
Work with partners to develop and support essential hardware, software, connectivity, tech support standards	10-06	7-11		District technology coordinators, advisory council, MSIP, TNP, COSN, ISTE

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A DESE Action Step	Begin Date	End Date	Examples	Partners
Continue to require minimum of 25% of state and federal technology funds to support professional development	ongoing			Districts and providers
Support and promote effective policies and procedures to facilitate administration, data management, and communication	ongoing			Districts, MSBA, MUSC, MOREnet, COSN
Support districts in complying with all state and federal guidelines	ongoing		HIPAA, FERPA, CIPA, etc.	
Support districts in establishing disaster recovery and security policies and procedures	ongoing			
Continue to promote state network and MOREnet Network Program (TNP)				
Target state/federal/E-rate funds to support TNP implementation and expansion	ongoing			Districts, MOREnet, MOREnet Council, State Library, Department of Higher Education
Continue TNP structure providing resources and services including and beyond bandwidth	ongoing		Promote access and use of electronic resources, filtering solutions, security and safety solutions, communication tools, training, technical support, and research and development	Districts, MOREnet, MOREnet Council, State Library, Department of Higher Education
Disseminate information of best practices via presentations, newsletters, and other avenues	ongoing			MOREnet, MOREnet Council, State Library, Department of Higher Education, MITC, METC, MASL, Interface, and other appropriate venues, <i>Newsline</i> articles, districts
Promote and support budget for technology (line item, per pupil)	ongoing			
Continue to collect, analyze, and report data to monitor state technology plan progress and drive change (Census of Technology, program records, etc.)	ongoing			District contact persons, program coordinators

GOALS, EVIDENCE OF SUCCESS, IMPLEMENTATION STRATEGIES, PLANS

(R) Resource Distribution

Goal

All district personnel and students will have equitable access to technology tools and resources to promote professional and academic performance.

Evidence of Success

Districts with successful programs have certain characteristics. A successful district enables resource distribution by:

- **providing equitable access to varied, numerous technology tools and resources that promote differentiated instruction**
 - appropriate resources are identified and supported to meet needs of diverse school personnel and student learners
 - digital resources and assistive technologies are provided for traditional and alternative learning environments, available any time, any place
- **using appropriate tools to determine district needs and monitor progress**
 - data collection, analysis, and reporting tools are identified and supported to help track student outcomes and drive administrative and instructional changes
 - frequent reviews (internal and external monitoring and evaluation) of technology plan are conducted to evaluation implementation and progress
- **establishing and supporting essential hardware, software, and connectivity standards**
 - needs assessment tools are identified and supported to establish and update standards for the technology tools and resources being used by district personnel and students

Major Implementation Strategy (MIS)

The Department of Elementary and Secondary Education will:

- R 1** assist districts in establishing and supporting equitable resources

Action Plan

Unless otherwise stated, action steps refer to work on the part of DESE personnel and partnering agencies and programs to assist districts in meeting state (and local) education technology goals. Please refer to the appendices for listing of acronyms, programs, and agency/organization partners.

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R DESE Action Step	Begin Date	End Date	Examples	Partners
Target funds (state, federal, other) to support state and district technology planning, implementation, and evaluation	ongoing			Districts, key stakeholders, and partnering agencies
Adopt/adapt NETS*S, NETS*T, and NETS*A achievement rubrics	7-07	12-07		State Board, districts, ISTE
Continue to support district implementation of responsible and safe use of technology	ongoing			iSAFE, (Missouri Safe Schools/RPDCs), NetSmartz (MOREnet), ISTE, COSN
Develop and provide assistance in implementing NETS*S assessment tools to evaluate student literacy in grades 2, 5, 8, and prior to graduation	10-06	7-07		OSEDA Technology Literacy Initiative and pilot districts, SETDA, ISTE, NCREL
Assist in the development and review of technology plans to determine district use of technology literacy assessment to measure progress, and drive curricular and/or professional development changes	ongoing		Promote technology literacy of students, teachers, administrators, support staff, etc.	Technology plan trainers, leaders, and readers
Continue to support inquiry-based instructional model across districts				
Target state and federal funds to support implementation and expansion of inquiry-based models (such as eMINTS)	ongoing			eMINTS National Center, instructional specialists, funded districts
Continue grant structures that require district teaming for building, implementing, and evaluating implementation projects	ongoing			eMINTS National Center, funded districts

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R DESE Action Step	Begin Date	End Date	Examples	Partners
Disseminate information of best practices via presentations, newsletters, and other avenues	ongoing			MITC, METC, MASL, Interface, and other appropriate venues, <i>Newsline</i> articles, eMINTS National Center, funded districts, evaluation teams
Continue to research impact data of inquiry-based models on diverse learners	ongoing			eMINTS National Center, funded districts, evaluation teams, Speech to Text project (Division Special Education)
Continue to support use of rigorous curriculum and high school graduation requirements in traditional and alternative learning environments, through technologies	ongoing		Identify and promote virtual education, assistive technology, and digital instructional resources	MoVIP, High Schools that Work, Project Lead the Way, eMINTS National Center, A+ Schools, MoDLA, MRDP
Support and promote use of performance-based evaluation of tools and users	10-06	On-going	Embed use of technology in classroom observations conducted for MSIP, annual evaluations (PBTE), etc. Develop tools for collecting, evaluating, and reporting observation findings (e.g., electronic evaluation tools)	School Improvement Program, RPDCs, districts, Teaching and Learning Institute, OSEDA Technology Literacy Initiative, Hallmarks of an Effective eMINTS Classroom, PBTE, PBLMSE, PBCE, SuccessLink, Leadership Academy, STARR Teachers, Regional Instructional Facilitators
Continue to partner with quality professional development providers on effective instructional strategies, including technology mediated solutions (distance learning and assistive technology)	ongoing			RPDCs, eMINTS National Center, CSD, PBS stations, eLearning for Educators: Mo Project, Teaching and Learning Institute, Southwest Center for Excellence, MoDLA, MRDP, MoVIP
Continue to support and promote educator use of technology to assess and monitor student learning, differentiate instruction, and to communicate expectations, goals, and progress to students, parents, and community	ongoing			RPDCs, Leadership Academy, eMINTS National Center, STARR Teachers, Regional Instructional Facilitators, ISTE, COSN, SETDA

GOALS, EVIDENCE OF SUCCESS, IMPLEMENTATION STRATEGIES, PLANS

(TS) Technical Support

Goal

All district personnel and students will have adequate technical support to effectively use administrative and instructional technologies.

Evidence of Success

Districts with successful programs have certain characteristics. A successful district enables technical support by:

- **providing effective technology leadership**
 - district employs, designates, or contracts a leader to coordinate and direct district technology program
 - technology coordinator oversees district instructional and administrative technologies (including, but not limited to, network, computers, and non-computer technology such as telephony, audio/video applications, etc.)
- **providing adequate instructional support for technology users**
 - district employs, designates, or contracts qualified instructional support person (with classroom teaching/technology integration expertise) one FTE per 50 educators
 - personnel provide instructional technology professional development, in-class instructional support, and assistance in integration of technology throughout the curricula
- **providing adequate technical support for technology users**
 - district employs, designates, or contracts qualified technical support (with technical certifications, specialized training, college or technical degrees, work-related experience, etc.) at the ratio of one FTE per 250 computing devices (variations: one FTE per 300 desk top computers, per 150 laptop computers, per 500 handheld computer, per 100 blackberries/smart phones)
 - personnel resolve 80% of typical technical problems within three working days

Major Implementation Strategy (MIS)

The Department of Elementary and Secondary Education will:

- TS 1** assist and support districts in providing sufficient and qualified personnel to provide technical and instructional technology support

Action Plan

Unless otherwise stated, action steps refer to work on the part of DESE personnel and partnering agencies and programs to assist districts in meeting state (and local) education technology goals. Please refer to the appendices for listing of acronyms, programs, and agency/organization partners.

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TS DESE Action Step	Begin Date	End Date	Examples	Partners
Target funds (state, federal, other) to support state and district technology planning, implementation, and evaluation	ongoing			Districts, key stakeholders, and partnering agencies
Adopt/adapt NETS*S, NETS*T, and NETS*A achievement rubrics	7-07	12-07		State Board, districts, ISTE
Continue to support district implementation of responsible and safe use of technology	ongoing			iSAFE, (Missouri Safe Schools/RPDCs), NetSmartz (MOREnet), ISTE, COSN
Develop and provide assistance in implementing NETS*S assessment tools to evaluate student literacy in grades 2, 5, 8, and prior to graduation	10-06	7-07		OSEDA Technology Literacy Initiative and pilot districts, SETDA, ISTE, NCREL
Assist in the development and review of technology plans to determine district use of technology literacy assessment (for students, teachers, administrators, support staff, etc.) to measure progress, and drive curricular and/or professional development changes	ongoing			Technology plan trainers, leaders, and readers
Continue to support inquiry-based instructional model (such as eMINTS) across districts				
Target state and federal funds to support inquiry-based implementation and expansion efforts	ongoing			eMINTS National Center, instructional specialists, funded districts
Continue grant structures that require district teaming for building, implementing, and evaluating implementation projects (such as eMINTS)	ongoing			eMINTS National Center, funded districts

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TS DESE Action Step	Begin Date	End Date	Examples	Partners
Disseminate best practices information of via presentations, newsletters, and other avenues	ongoing			MITC, METC, MASL, Interface, and other appropriate venues, <i>Newsline</i> articles, eMINTS National Center, funded districts, evaluation teams
Continue to research impact data of inquiry-based models on diverse learners	ongoing			eMINTS National Center, funded districts, evaluation teams, Speech to Text project (Division Special Education)
Continue to support use of rigorous curriculum and high school graduation requirements in traditional and alternative learning environments,	ongoing		promote technologies such as virtual education, assistive technology, and digital instructional resources	MoVIP, High Schools that Work, Project Lead the Way, eMINTS National Center, A+ Schools, MoDLA, MRDP
Support and promote use of performance-based evaluation of tools and users,	10-06	on-going	Embed use of technology in classroom observations conducted for MSIP, annual evaluations (PBTE), etc. Develop tools for collecting, evaluating, and reporting observation findings (e.g., electronic evaluation tools)	School Improvement Program, RPDCs, districts, Teaching and Learning Institute, OSEDA Technology Literacy Initiative, Hallmarks of an Effective eMINTS Classroom, PBTE, PBLMSE, PBCE, SuccessLink, Leadership Academy, STARR Teachers, Regional Instructional Facilitators
Continue to partner with quality professional development providers on effective instructional strategies, including technology mediated solutions (distance learning and assistive technology)	ongoing			RPDCs, eMINTS National Center, CSD, PBS stations, eLearning for Educators: Mo Project, Teaching and Learning Institute, Southwest Center for Excellence, MoDLA, MRDP, MoVIP
Continue to support and promote educator use of technology to assess and monitor student learning, differentiate instruction, and to communicate expectations, goals, and progress to students, parents, and community	ongoing			RPDCs, Leadership Academy, eMINTS National Center, STARR Teachers, Regional Instructional Facilitators, ISTE, COSN, SETDA
Target funds to support district technology budgets	ongoing		Promote funding to support district and state infrastructure and TCO, based on local, state, and national standards	Districts

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TS DESE Action Step	Begin Date	End Date	Examples	Partners
Help schools create line item budget for technology	Ongoing		Setting a per-pupil expenditure rate, a flat percent of total operating budget, other	Districts, MSIP, Prime Vendor, Office of Administration, State Library, ISTE, COSN, Department of Higher Education, and other hardware, software, and support providers
Work with partners to develop and support essential hardware, software, connectivity, and technical support standards	10-06	7-11		District technology coordinators, advisory council, MSIP, TNP, COSN, ISTE
Continue to require minimum of 25% of state and federal technology funds to support technology professional development	Ongoing			Districts and providers
Promote effective implementation and evaluation policies and procedures to facilitate administration, data management, and communication	Ongoing			districts, MSBA, MUSC, MOREnet, COSN
Support districts in complying with state and federal guidelines	Ongoing		HIPAA, FERPA, CIPA, etc.	
Support districts in establishing disaster recovery and security policies / procedures	Ongoing			
Partner to secure and support state-wide digital resources to support instruction and administration	Ongoing			
Partner to identify and promote technical support standards and benchmarks	10-06	7-11	Numbers and credentials of personnel providing technical support, instructional support, and professional development	District tech coordinators, MSIP, advisory council, certification and accreditation entities and related professional organizations (such as MACTE, MoACTE, METPA, MoDLA, MACE)
Continue to collect, analyze, and report data to monitor state technology plan progress and drive change	ongoing		Census of Technology, program records, etc.	District contact persons, program coordinators

2007-11 Missouri Education Technology Strategic Plan

STATUS REPORT – Updated September 2008

The 2007-11 Missouri Education Technology Strategic Plan (METSP) details eight major implementation strategies for the Department to help districts meet objectives related to five education technology goals:

1. **Student learning:** student academic achievement and performance, including technology literacy, will be improved through the use of education technologies.
2. **Teacher preparation:** Teacher performance, including the delivery of instruction and technology literacy, will be improved through the use of education technologies.
3. **Administration:** The teaching and learning process will be enhanced through the use of technology for administration, data management, and communications.
4. **Resource distribution:** School administrators, teachers, staff, and students will have equitable access to education technologies that promote student performance and academic achievement.
5. **Technical support:** School administrators, teachers, staff, and students will have the technical support needed to use education technologies effectively and efficiently.

This METSP Status Report outlines specific objectives related to these goals, presents established baseline and expected levels to be reached by the end of the five-year plan (June 30, 2011), and charts annual progress toward meeting the objectives. The data used for this report are gathered via the annual Missouri Census of Technology (COT) and records from various state and federal ed-tech programs.

*Notes: Definitions of key terms used in this report can be found in the Core Data Manual, under instructions for completing the Census of Technology (Screens 30 and 31). **The number of districts completing COT Screen 30 increased to 540 in 2007 and 550 in 2008 (to include charter LEAs);** the number of buildings completing COT Screen 31 varies from year to year. COT data analyses exclude juvenile centers, special education cooperatives, and buildings where student attendance is reported elsewhere (e.g., "home school" versus "gifted center"), or other buildings with no student enrollment data to report.*

	Baseline	Annual Status				Goal
Goals and Desired Outcomes	2006	2007	2008	2009	2010	2011
Student learning						
DESE will establish/support Missouri Virtual Instruction Program. Annually, MoVIP will: <ul style="list-style-type: none"> • offer courses, K-12 • offer 9+ AP courses • serve 1,000+ students • serve students from all 115 counties • serve part-time & non-public students <i>Program records: number courses and enrollments</i>	NA	NA	K-5, 9-12 9 2,000 109 84% / 30%			MoVIP in place K-12 15 5,000 115 Yes
Districts will establish/endorse student technology standards. <i>COT Screen 30 #2: number / percent districts</i>	484/93%	511/95%	524/95%			550/100%
Students will be technology literate by the end of grade 8. <i>COT 30 #8: median district percent</i>	90%	90%	92%			100%

2007 Missouri Education Technology Strategic Plan

	Baseline	Annual Status				Goal
Goals and Desired Outcomes	2006	2007	2008	2009	2010	2011
Student learning (continued)						
Students will routinely use: • educational software <i>COT 31 Tech Usage #1: median building percent</i>	79%	80%	80%			100%
Students will routinely use technology to: • produce media products/presentations • produce written products • conduct online research • take online course(s) <i>COT 31 Tech Usage #2: building mean</i>	43% 60% 56% 2%	46% 61% 58% 4%	50% 63% 61% 4%			100% 100% 100% 25%
Teacher preparation						
DESE will help establish/support online programs/courses for teacher professional development. Annually, the e-Learning for Educators program will: • train 10+ course facilitators • offer 20+ courses • serve 250+ teachers in courses • train 5+ course developers • produce 5+ Missouri-specific courses <i>Program records</i>	24 10 111 NA NA	+12=36 26 +286=397 24 5	+11 = 47 34 +498=895 +12=36 +8=13			80 100 1,500 40 25
Districts will integrate technology into core subjects: • communication arts • mathematics • science • social studies <i>COT 30 #6: number / percent districts</i>	512/98% 481/92% 494/94% 483/92%	531/98% 504/93% 512/95% 503/93%	538/98% 524/95% 531/96.5% 516/94%			100% 100% 100% 100%
Districts will establish/endorse technology standards for teachers. <i>COT 30 #2: number / percent districts</i>	434/83%	467/86%	473/86%			550/100%
Teachers will possess intermediate or advanced technology skills. <i>COT 31 Training #1: building mean</i>	82%	84%	86%			100%
Teachers will routinely use: • educational software <i>COT 31 Tech Usage #1: building mean</i>	76%	79%	80%			100%
Teachers will routinely use technology to: • produce media/multimedia presentations • produce written products • conduct online research • prepare lesson plans • manage student records • track student performance • assess student learning • deliver and present instruction • participate in online courses <i>COT 31 Tech Usage #2: building mean</i>	51% 80% 76% 68% 76% 77% 72% 67% 12%	59% 82% 77% 71% 81% 82% 78% 67% 14%	64% 84% 81% 77% 86% 86% 82% 73% 17%			100% 100% 100% 100% 100% 100% 100% 100% 25%
Teachers will be able to fully integrate technology into curriculum and instruction. <i>COT 31 Tech Usage #4: building mean</i>	50%	60%	65%			90%

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	Baseline	Annual Status				Goal
Goals and Desired Outcomes	2006	2007	2008	2009	2010	2011
Teacher preparation (continued)						
DESE will help establish/support program(s) to prepare teachers to implement inquiry-based instruction powered by technology. Annually, the eMINTS program will train:			Comp +167 4All +98			
• 100+ teachers (who complete two-year Comprehensive or eMINTS4All)	1,136	(+257) 1,393	(+265) 1,658			2,500
• 10+ ed-tech specialists (who complete two-year PD4ETS)	82	(+22) 104	(+16) 120			150
<i>Program records</i>						
Administration						
DESE will secure/sustain state and federal ed-tech funding/programs: MOREnet connectivity (TNP) and related E-rate, federal Title II.D (EETT) grants, state virtual school (MoVIP), state METS grants, and e-Learning for Educators (EfE) project	\$12.56 m.	\$9.72 m.	\$19.18 m.			\$20+ million annually
<i>Program records</i>	\$3.24 TNP \$2.89 E-rate \$6.25 EETT \$0.18 EfE	\$3.85 TNP \$2.52 E-rate \$3.13 EETT \$0.22 EfE	\$4.70 TNP \$3.04 E-rate \$3.10 EETT \$5.20 MoVIP \$2.90 METS \$0.24 EfE			
DESE will help establish/support an electronic planning tool (ePeGS) to help districts develop effective technology plans and DESE funding to goals and objectives	NA	In progress	Planning tool in place June 08			ePeGS completed – and used by all districts
<i>Program records, website statistics</i>						
Districts will establish/endorse technology standards for administrators.	426/81%	456/82%	466/85%			550/100%
<i>COT 30 #2: number / percent districts</i>						
DESE will help continue programs that provide cost-effective access to Internet and online resources. Annually, MOREnet K-12 TNP and E-rate programs will serve:						
• 512+ districts, charter LEAs, state schools (542 possible)	513	516	518			523/95%
<i>Program records</i>						
Building administrators will possess intermediate or advanced technology skills.	92%	93%	95%			100%
<i>COT 31 Training #1: building mean</i>						
Building administrators will routinely use technology to:						
• manage student records	85%	87%	89%			100%
• track student performance	84%	85%	88%			100%
• assess student learning	74%	76%	78%			100%
• communicate with peers, parents, experts	95%	95%	96%			100%
• participate in online courses/pd	11%	12%	17%			25%
<i>COT 31 Tech Usage #2: building mean</i>						
Districts will provide/support email for:						
• administrators	508/97%	522/97%	534/97%			550/100%
• teachers	498/95%	518/96%	530/96%			550/100%
• support services staff	482/92%	503/93%	509/94%			550/100%
<i>COT 30 #7: number / percent districts</i>						
Buildings will maintain at least one technology-mediated system for parent and patron feedback.	98%	97%	98%			100%
<i>COT 31 Tech Usage #5: percent buildings</i>						

2007 Missouri Education Technology Strategic Plan

	Baseline	Annual Status				Goal
<i>Goals and Desired Outcomes</i>	2006	2007	2008	2009	2010	2011
Resources						
MOREnet TNP will provide sufficient bandwidth to meet district member needs. <ul style="list-style-type: none"> Increasingly more districts are connected at/above 1.6Mb Median access statewide is at/above 4Kb per student 10Mb per 1,000 staff and students <i>Program records</i>	134 / 513 26% NA NA	227 / 516 44% 4.16 NA	323 / 518 62% 4.90 83 / 16%			100% ≥ 4.0Kb 25%
Districts will maintain local and/or wide area networks. <ul style="list-style-type: none"> buildings connected to LAN or WAN buildings are connected to Internet <i>COT 30 #5 and COT 31 Connectivity #1, Hardware #3</i>	484/92% 99.7%	484/92% 99.7%	501/91% 99.9%			550/100% 100%
Buildings will have infrastructure/capacity to support synchronous and asynchronous distance learning delivery methods. <i>COT 31 Connectivity #3: percent buildings</i>	77%	78%	81%			100%
Buildings will equip instructional rooms with: <ul style="list-style-type: none"> telephone access modern computer, Internet-connected ratio of 2 students per computer or better (instruction computer ratio) ratio of 2 students per Internet-connected computer (instructional rooms) SMART Board and access to printer <i>COT 31 Hardware #4: percent classrooms</i>	60% 90% 2.94 3.18 32%	63% 93% 2.81 2.96 39%	65% 93% 2.65 2.77 47%			90% 100% 2.00 2.00 50%
Technical support						
Districts will employ/contract adequate technical support. <ul style="list-style-type: none"> districts have technology coordinators <i>COT 30 #3: percent districts / median FTE</i>	94% / 1.0	93% / 1.0	94% / 1.0			100% / 1.0
Buildings will employ/provide adequate technical and instructional support. <ul style="list-style-type: none"> buildings have technical support staff technical problems/repairs are resolved in 3 working days computers are in working order buildings have instructional technology support staff <i>COT 31 Support #1,5,6 and Technology Usage #3</i>	95%/1.0 88% 98% 95%/1.0	94%/1.0 88% 98% 91%/1.0	94%/1.1 88% 98% 91%/1.2			100%/1.0 100% 100% 100%/1.0

APPENDIX: STATE PLANNING COMMITTEES

The Missouri Education Technology Strategic Plan is the result of collaborative work by DESE, SuccessLink, and numerous Missouri education and business community stakeholders. Instructional Technology and SuccessLink would like to thank the following people who volunteered their time and provide valuable input and feedback.

Oversight/Leadership Team

DESE INSTRUCTIONAL TECHNOLOGY STAFF:

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Lisa Walters, Education Consultant, Library Media and Technology

SUCCESSLINK STAFF:

Mark Yehle, Director

Stacey Franks, Assistant Director

Julie Barchenski, TLA Project Assistant

Chris Davis, Web Developer/Videographer

Student Learning Committee

CHAIRS:

Becky Hartzell, Director of Technology, Branson R-IV School District

Lisa Bailey, Literacy/Technology Specialist, Perry County 32 School District

MEMBERSHIP:

Nicole Fritts, Technology Coordinator, Professional Development Chairperson, Harrisburg R-VIII School District

Helen Gibbar, Teacher, Cape Girardeau 63 School District

Wayne Goddard, Supervisor, Special Education Effective Practices, DESE

Sharon Hayden, Superintendent, Hartville R-II School District

Ellen Kay, Teacher, Professional Development Chair, Gorin R-III School District

Sandy Miller, Teacher, Branson R-IV School District

Wayne Neathery, Technology Coordinator, Perry County District 32 School District

Doug Sutton, Director, Career Education Initiatives, DESE

Connie Toney, Reading Specialist, Perry County District 32 School District

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Teacher Preparation Committee

CHAIRS:

Marilyn Terry, Director, Technology Services, Pattonville R-III School District

Hayet Woods, Teaching and Learning Coach, Instructional Technology, Independence 30 School District

MEMBERSHIP:

Monica Beglau, Executive Director, eMINTS National Center

Ruth Litman-Block, Director, Virtual Learning Center, Cooperating School Districts of Greater St. Louis, Inc.

Martha Bogart, Instructional Technology, Distance Learning Coordinator, Virtual Learning Center, Cooperating School Districts of Greater St. Louis, Inc.

Connie Coy, Video Systems Administrator, MOREnet

Chris Diggs, Trainer, Instructional & Information Technology Support Columbia 93 School District

Linda Dooling, Supervisor, Leadership Academy, DESE

Amy Gates, Technology Coordinator, Lee's Summit R-VII School District

Nancy George, Instructional Technology, METC coordinator, Virtual Learning Center, Cooperating School Districts of Greater St. Louis, Inc.

Marcia Haskin, Executive Director, Missouri Staff Development Council

Lorie Kaplan, Program Coordinator, eMINTS National Center

Molly Mead, Technology Coordinator, School of Education, University of Missouri – Kansas City

Melody Paige, Technology Coordinator, Monett R-I School District

Cindy Wells, Teacher, Savannah R-III School District

Administration Committee

CHAIRS:

Gloria Stephenson, Executive Director, Technology, Independence 30 School District

Mark Yehle, Director, SuccessLink

MEMBERSHIP:

Rob Dowis, Superintendent, Jefferson C-123 School District

Sam Duncan, Director, State/Federal Programs, Jackson R-II School District

Bill Giddings, Director, Education Programs and MOREnet Affiliates, MOREnet

Debbie Hughes, Director, Technology/Media Services, Jefferson City School District

Mike Jinks, Superintendent, Warrensburg R-VI School District

Steve Kleinsmith, Superintendent, Nixa R-II School District

Eric Nicklas, Manager, Technology Network Program, MOREnet

Lane Novinger, Superintendent, Buchanan Co. R-IV School District

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Administration Committee (continued)

Kathy Reifschneider, Director, Instruction/Staff Development, Festus R-VI School District

Brett Siegel, Sr. Systems Engineer and Digital Media Specialist, Apple, Inc.

Laura Whaley, K-12 Sales Executive, Apple, Inc.

Resources Committee

CHAIRS:

Everett Loughridge, Technology Coordinator, Belton 124 School District

Steven Chancellor, Technology Integration Specialist, Belton 124 School District

MEMBERSHIP:

Bill Bratberg, Asst. Professor, Middle and Secondary Education, Southeast Missouri State University

Bettie Downs, Technology Director, Bayless School District

Bill Gant, Technology Director and IDL Program Coordinator, Warsaw R-IX School District

Debra Kidwell, Manager, Contract Administration and Procurement Services, University of Missouri System, Columbia, MO MOREnet

Cherin McDonald, Media Specialist, Belton 124 School District

Fred Pellerito, Assistive Technology Specialist/MR Coordinator-Special Services, Belton 124 School District

Technical Support Committee

CHAIRS:

Andy Hall, Technology Director, Mexico 59 School District

Stan Smith, Instructional Technology Coordinator, Warrensburg R-VI School District

MEMBERSHIP:

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Julie Brunner, Technology Coordinator, Holden R-III School District

Randy Raw, Manager, MOREnet Security, MOREnet

Karen Snelling, Technology Coordinator, Ozark R-VI School District

Nancy Toombs, Coordinator of Technology, Ste. Genevieve Co. R-II School District

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APPENDIX: ED-TECH PROGRAMS, PARTNERS, ACRONYMS

Effective implementation of the 2007-11 Missouri Education Technology Strategic Plan requires communication, cooperation, and collaboration among a variety of people and organizations. Below is an alphabetical listing of some of the key partners who assist the Department in helping schools to effectively integrate technology. Those listed with an asterisk (*) indicate their involvement in the development of the 2007 METSP. Also listed are some of the more key programs, programs, and or initiatives that help guide ed-tech planning, implementation, and evaluation in Missouri and across the United States. Please note that this list should not be viewed as exhaustive as there are other partners and programs that may become involved, depending on a situation's challenges and the resources available.

ALTEC – <http://www.altec.org> (see R*TECs)

The Advanced Learning Technologies (ALTEC) project at the University of Kansas Center for Research on Learning utilizes advances and innovative technologies to improve teaching and learning. Committed to taking hold of the promise to empower learners of all types and ages, ALTEC focuses on instructional web-based resources, professional development, program support, scalable online assessment, and assistance for special needs. [ALTEC sponsored **HPR*TEC** through a U.S. Department of Education (ED) grant that previously supported ten regional consortia for technology in education.]

- **Star Tools and Networks**

The ALTEC Network includes: 4Teachers, 4Kids, Technology Rich Classrooms, Loti regional training, PI*TEC, and others. Web resources include a number of teacher tools including: RubiStar, NoteStar, TrackStar, QuizStar, ThinkTank, Checklists, ProfilerPro.

- **PI*TEC** – <http://www.pitec.org>

ALTEC administers Missouri's Title II.D by-pass program, PI*TEC – the Private and Independent Technology in Consortium. (see EETT)

CBHE – Coordinating Board of Higher Education and DHE – Dept. of Higher Education
<http://www.dhe.mo.gov/>

The Department of Higher Education and the Coordinating Board serve the Missouri's public, private, and proprietary colleges and universities. DHE and the Department of Elementary and Secondary Education (DESE) collaborate on a variety of technology-related programs and initiatives. The Higher Education appropriation supports the statewide Internet backbone, connecting Missouri's colleges and universities, K-12 public schools, public libraries, and state government agencies. (See MOREnet)

CIPA – Children's Internet Protection Act <http://www.fcc.gov/cgb/consumerfacts/cipa.html>

The Children's Internet Protection Act (CIPA) is a federal law enacted by Congress in December 2000 to address concerns about access to offensive content over the Internet on school and library computers. CIPA imposes certain types of requirements on a school or library that receives funding support for Internet access for internal connections from the **E-rate program** – a program that makes certain technology is more affordable for eligible schools and libraries. (See E-rate program)

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Connections Conference <http://www.more.net/conferences/index.html> (see MOREnet)

This conference provides information on current technologies and offers insight into future directions of technology in education. It is targeted for those who manage and support technology in public libraries, K-12 schools and higher education, including, but not limited to, technology coordinators and technology support specialists who are current members of MOREnet.

CoSN – Consortium for School Networking <http://cosn.org>

The Consortium for School Networking (CoSN) mission is to serve K-12 technology leaders who use technology strategically to ultimately improve teaching and learning. CoSN provides a variety of programs and services for its membership, provides public access to a number of web-based resources, and hosts an annual **K-12 School Networking Conference**.

*** CSD – Cooperating School Districts** <http://csd.org/>

Cooperating School Districts of Great St. Louis, Inc. (CSD) is a nonprofit educational consortium that provides cooperative purchasing, technology, staff development, legislative, human resource, research and financial services to districts in and around the St. Louis area. CSD hosts the **Midwest Education Technical Conference (METC)** that provides a forum for professionals from across the Midwest to share and learn about issues related to education and technology.

DESE – Dept. of Elementary and Secondary Education <http://dese.mo.gov/>

The administrative arm of the State Board of Education, DESE (Department of Elementary and Secondary Education) works to assure all citizens have access to high-quality public education. Primarily a service agency, DESE works with educators, legislators, government agencies, and others to maintain a strong public education system through its statewide school-improvement initiatives and regulatory functions.

- **DESE Strategic Plan** <http://www.dese.mo.gov/divadm/StrategicPlan.html>
Serving as a guide for the organization, this plan focuses on five outcomes to help promote the success of children in public classrooms and adults in the workforce.
- **DESE Instructional Technology** <http://dese.mo.gov/divimprove/instrtech/>
This section works to help schools use education technologies in effective ways that facilitate administration and enhance teaching and learning. Major tasks include administration of education technology grant programs, development and oversight of state and local technology plans, and technology data collection and reporting.
- **COT – Census of Technology**
<http://dese.mo.gov/divimprove/instrtech/statefunded/census/index.htm>
Districts and school attendance centers submit core data related to technology planning, training, hardware, connectivity/distance learning, support, usage, and funding. These data are collected annually and are used for long-range ed-tech planning, budgeting, grant allocations, research, and state and federal reporting.
- **Technology Grant Programs** (see EETT and METS)
Instructional Technology administers the federal **Title II.D (EETT)** competitive grant program which helps districts implement effective instructional strategies powered by multimedia technologies and a state **METS** program to provide technology and professional development to promote academic achievement related to mathematics, engineering, technology, and science.

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- **Newsline**
Published monthly online by DESE Instructional Technology, *Newsline* provides a section update with timely updates and information, planning and grant-writing tips, and features articles from teachers and organizations on how technology is integrated in classrooms and schools across the state.
- **DESE MoVIP – Missouri Virtual Instruction Program**
<http://dese.mo.gov/divimprove/curriculum/movip/>
The Missouri Virtual Instruction Program (MoVIP) provides affordable, high-quality, standards-based supplemental and full-time online coursework for Missouri schools needing credit retrieval, advanced courses, curriculum enhancements and/or to resolve scheduling conflicts.
- **DESE MSIP – Missouri School Improvement Program**
<http://dese.mo.gov/divimprove/sia/msip>
The Missouri School Improvement Program has the responsibility of reviewing and accrediting Missouri school districts on a five-year review cycle. The MSIP Standards and Indicators are created to guide school improvement. Technology is embedded in the standards and indicators.

DHE – Dept. of Higher Education <http://www.dhe.mo.gov/>

The Missouri Department of Higher Education (DHE) carries out the goals and administrative responsibilities for the state system of higher education, which serves 13 public four-year colleges and universities, 19 public two-year colleges, one public two-year technical college, 25 independent colleges and universities, and 152 proprietary schools.

EETT – Title II.D Enhancing Education through Technology Program

<http://www.ed.gov/policy/elsec/leg/esea02/pg34.html>

Funded under the No Child Left Behind Act (NCLB), the Title II.D “Enhancing Education Through Technology” (EETT) Program is designed to improve student achievement through the use of technology. Program goals for districts include having technology integrated into core curricula and mechanisms in place to ensure students are technology literate at the end of their eighth grade. The program provides formula and competitive grants to districts.

*** e-Learning for Educators: Missouri** <http://www.elearningmo.org/>

e-Learning for Educators: Missouri is part of an eight-state online professional development project scheduled as a five-year effort. The program is funded by a U.S. Department of Education [Ready to Teach](#) grant. The program develops and delivers high quality online professional development designed to increase teacher knowledge and skills to improve student performance.

*** eMINTS Program** <http://emints.org>

enhancing Missouri’s Instructional Networked Teaching Strategies (eMINTS), administered by the eMINTS National Center, University of Missouri Office of Vice President for Academic Affairs, supports educators as they integrate technology into inquiry-based, student-centered, interdisciplinary, collaborative teaching practices that result in improved student performance and enriched instructional effectiveness. The Center provides various professional development programs, and supporting resources, to assist in school- and district-wide implementation models.

- **eThemes** <http://emints.org/ethemes/index.shtml>
An extensive database of content-rich, age-appropriate, web-based resources organized around specific themes.

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E-rate Program <http://www.universalservice.org/sl/>

The Schools and Libraries Program of the Universal Service Fund, commonly known as “E-rate”, is administered by the Universal Service Administrative Company (USAC) under the direction of the Federal Communications Commission (FCC), and provides discounts to assist most schools and libraries in the United States to obtain affordable telecommunications and Internet access.

Helix Conference <http://www.more.net/conferences/index.html> (see MOREnet)

Sponsored by Missouri Education and Research Consortium (MERC) and MOREnet, the Higher Education Learning and Information eXchange (HELIX) conference is designed to bring together those faculty, administrators, library and technical personnel from higher education charged with supporting instruction and with applying technology to the teaching and learning process.

HPR*TEC – High Plains Regional Technology in Education Consortium

http://www.rtec.org/rtec.cfm?rtec_id=4 (see R*TECs and ALTEC)

i-SAFE – Internet Safety Education <http://www.isafe.org/>

Endorsed by the U.S. Congress, i-SAFE helps educate students on how to avoid dangerous, inappropriate, or unlawful online behavior, through K-12 curriculum and community outreach programs to parents, law enforcement, and community leaders.

ISTE – International Society for Technology in Education <http://www.iste.org/>

The International Society for Technology in Education (ISTE) is a non-profit organization that provides leadership and service to improve teaching, learning, and school leadership by advancing the effective use of technology in PK-12 and teacher education. ISTE provides a number of programs and services for its membership, provides public access to a number of web-based resources such as the **National Educational Technology Standards (NETS)**, and hosts the annual **National Educational Computing Conference (NECC)**.

K-12 School Networking Conference <http://cosn.org> (see CoSN)

Each year, the Consortium for School Networking holds a national technology leadership conference dedicated to policy and effective implementation from school district, state, and national perspectives.

Learning Point Associates <http://www.learningpt.org/> (see NCREL)

The **North Central Regional Educational Laboratory® (NCREL)**, known now as REL Midwest, is operated by Learning Point Associates. Associates provide expertise in comprehensive school improvement, data for school improvement, literacy, mathematics and science, teacher quality, and technology.

- **Technology** <http://www.learningpt.org/page.php?pageID=81>
Learning Point Associates has developed research-based technology products and services to help educators in elementary, middle, and high schools. Newest products focus on assessing and improving technology literacy and on helping professionals understand the policies and practices around K-12 online learning. All products are research-based and either measure or are linked to the NETS.

MARE – Missouri Association of Rural Educators <http://www.maore.com>

The purpose of this association is to focus on the need and concerns unique to rural education, to provide a forum for the discussion and resolution of those needs and concerns, and to present a unified voice to promote rural education in Missouri.

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MASL – Missouri Association of School Librarians <http://www.maslonline.org/>

This statewide organization provides Missouri's school librarians with a variety of services including conferences, special white papers, professional development, scholarships and awards.

McREL – Mid-continent Research for Education and Learning <http://www.mcrel.org/>

Supported by contracts with the U.S. Education Department, Office of Educational Research and Improvement (OERI), McREL serves as the Regional Education Laboratory for the Central Region (serving Colorado, Kansas, Missouri, Nebraska, North Dakota, South Dakota, and Wyoming), providing practical, research-based solutions for teachers, principals, superintendents, and trainers.

METC – Midwest Education Technical Conference (see CSD)

<http://csd.org/vnews/display.v/ART/450082a51c302>

METC is designed to bring together a diverse collection of speakers to share their knowledge, experience, strategies and expertise using established and emerging technologies in the classroom.

*** METPA – Missouri Educational Technology Professionals Association**

METPA was established in 2001 as a network of human and material resources to promote and support Missouri educational technology professionals in the areas of certification, equitable access, student knowledge adequate funding, and professional development.

METS – Missouri Mathematics, Engineering, Technology, and Science

<http://www.missourimets.com>

The Missouri Mathematics, Engineering, Technology and Science (METS) Coalition was formed following the 2006 METS Summit. Comprised of business leaders, educators, and policy makers from a diverse group of stakeholders across Missouri, the Coalition created recommendations and strategies for Improving the performance of all pre-school through graduate school students, expanding the pool of students motivated to pursue METS careers, expanding the pool of quality METS educators, establishing a technology plan to support METS efforts, and increasing public awareness of the value of METS knowledge and METS-related careers.

Missouri State Library <http://sos.mo.gov/library/>

An arm of the Secretary of State's Office (SOS), the Missouri State Library (MSL) promotes development and improvement of library services throughout the state. The SOS appropriation supports library connections to the MOREnet network (REAL Program) and is the major contributor to MOREnet's suite of online resources. MSL and DESE contract MOREnet to assist Missouri schools and libraries in applying for and benefiting from the Universal Service Fund's E-rate program. (see MOREnet)

Missouri Virtual School (MVS) <http://mvs.missouristate.edu/>

The Missouri Virtual School (MVS) provides high school courses to students statewide as part of the Missouri State University's statewide public outreach mission.

MITC – Missouri Instructional Technology Conference (see MOREnet)

<http://www.more.net/conferences/index.html>

This MOREnet conference brings together educators interested in maximizing the opportunities for instructional technology in Missouri schools. The conference includes three and six-hour pre-conference workshops, breakout sessions, hands-on seminars, roundtable discussions, networking and collaboration opportunities, and Exhibitor Fair of latest technology tools/expertise.

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* **MO-CAPE – Missouri Council for American Private Education** <http://www.mocape.org>

The Council for American Private Education (CAPE) was founded in 1971 to create a unified voice for the interests of private schools across the country. In 1981, MO-CAPE formed as the first state affiliate of the national organization and has since been known as the voice of Missouri's private schools.

MO-ACTE – Missouri Association for Career and Technical Education <http://www.mo-acte.org/>

The Missouri Association for Career and Technical Education (MO-ACTE) promotes development of vocational-technical education within the state of Missouri.

* **MoDLA – Missouri Distance Learning Association** <http://www.modla.org/>

MoDLA promotes effective application of distance learning strategies to maximize access, equity, and quality of educational resources for teachers and learners of all ages.

* **MOREnet – Missouri Research and Education Network** <http://www.more.net>

MOREnet provides high-speed, reliable Internet access to the state's public sector. Affiliated with the University of Missouri, MOREnet serves higher education, k-12 schools, public libraries, state agencies, and other organizations and government agencies in Missouri.

- **TNP – K-12 Technology Network Program** <http://www.more.net/programs/k12tnp/>
This program provides affordable Internet connectivity and support services for Missouri public school districts and charter LEAs.
- **Conferences, Events, and Online Resources**
MOREnet conducts annual conferences (**Missouri Instructional Technology Conference, Connections, Helix**), workshops, webinars, and Internet Safety Nights; provides E-rate consultation services and various for-fee services; and hosts a variety of online resources that include: EBSCOhost, Gale Discovering Collection, Learning Express Library, Newsbank, and Annenberg Media, among others.
- **E-rate Assistance** <http://www.more.net/services/e-rate/> (see E-rate)
MOREnet services and resources to assist school and library participation in the E-rate program include website and online resources, an email discussion list, and a variety of training opportunities to learn more about the E-rate program. To complement regional and online events, MOREnet has recorded training modules that are available anytime.
- **NetSmartz** <http://www.netsmartz.org/education/mo> (see also NetSmartz Workshop)
MOREnet provides Missouri-specific materials and training to help schools implement NetSmartz, a program to teach children how to stay safer on the Internet.

MoVIP – Missouri Virtual Instruction Program <http://dese.mo.gov/divimprove/curriculum/movip/>

MoVIP provides affordable, high-quality, standards-based supplemental and full-time online coursework for Missouri schools and students needing credit retrieval, advanced courses, curriculum enhancements and/or to resolve scheduling conflicts.

* **MRDP – Missouri Rural Development Partners** <http://mrdp.net/>

This organization brings the public and private sectors together in a neutral forum to identify, explore and resolve rural issues through collaboration and consensus building. [Previously known as the Missouri Rural Opportunities Council (**MoROC**)]

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MSBA – Missouri School Boards Association <http://www.msbanet.org/>

This organization provides policy and political leadership at the local, state, and national levels to advance excellence in public education through school board leadership.

National Education Technology Plan

<http://www.ed.gov/about/offices/list/os/technology/plan/2004/site/edlite-default.html>

Developed by the U.S. Department of Education with input from educators and technology experts across the country, this plan details successful initiatives and partnerships developed at the state and/or local levels, and concludes with a series of recommendations and action steps schools can consider to enhance the use and benefits of new technologies, within the context of systemic transformation and technology leadership, management, teacher training and funding.

NCREL – North Central Regional Education Laboratory (See Learning Point Associates)

<http://www.ncrel.org/>

NCREL, known now as REL Midwest and operated by Learning Point Associates, provides expertise in comprehensive school improvement, data for school improvement, literacy, mathematics and science, teacher quality, and technology. Technology-related works include the suite of TechPOINT™ Proficiency Assessments, Surveys, and Professional Development to help educators measure progress on technology goals and assess technology literacy of fifth- and eighth-grade students. VirtualPOINT™ helps schools evaluate or reevaluate virtual offerings.

NECC – National Educational Computing Conference (see ISTE)

NECC serves as a forum in which to learn, exchange, and survey the field of educational technology. This annual conference – presented by ISTE and keyed to the National Educational Technology Standards (NETS) – features hands-on workshops, lecture and interactive concurrent sessions, discussions with key industry leaders, and an extensive educational technology exhibit.

NETS – National Educational Standards <http://www.iste.org/AM/Template.cfm?Section=NETS>

The National Educational Technology Standards (NETS), developed for students, teachers and teacher education programs, and administrators, serve as roadmaps for improved teaching and learning. The NETS*S, for example, define what students need to know and be able to do with technology to learn effectively and live productively in a rapidly changing digital world.

NetSmartz <http://www.NetSmartz.org>

The NetSmartz Workshop® is an interactive, educational safety resources from the National Center for Missing & Exploited Children® and Boys and Girls Clubs of America for children ages 5-17, parents, guardians, educators, and law enforcement, using age-appropriate, 3-D activities.

OSEDA – Office of Social and Economic Data Analysis <http://www.oseda.missouri.edu/>

A unit of University Outreach and Extension at the University of Missouri, OSEDA informs community leaders and citizens about social and economic trends impacting the people and communities of the state of Missouri.

P21 – Partnership for 21st Century Skills <http://www.21stcenturyskills.org/>

The Partnership for 21st Century Skills (P21) brings together the business community, education leaders, and policymakers to define a powerful vision for 21st century education to ensure every child's success as citizens and workers in the 21st century. The Partnership encourages schools, districts and states to advocate for the infusion of 21st century skills into education and provides tools and resources to help facilitate and drive change.

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- **Framework for 21st Century Learning**

http://www.21stcenturyskills.org/index.php?option=com_content&task=view&id=254&Itemid=120

The Partnership for 21st Century Skills has developed a unified, collective vision for 21st century learning to strengthen American education. The Framework calls for alignment of 21st century standards, assessments, curriculum, instruction, professional development and learning environments to produce a support system that produces 21st century outcomes for today's students.

Performance Based Evaluation Guidelines (PBTE) (Missouri)

<http://www.dese.mo.gov/divteachqual/leadership/profdev/pbeguide.htm>

Missouri first passed legislation in 1985 which requires districts to implement a performance-based administration evaluation process.

- **Library Media Specialist** <http://www.dese.mo.gov/divteachqual/leadership/profdev/LMS.pdf>
- **Principal** <http://www.dese.mo.gov/divteachqual/leadership/profdev/PBPE.pdf>
- **Teacher** <http://www.dese.mo.gov/divteachqual/leadership/profdev/PBTE.pdf>

PI*TEC – Missouri Title II.D By-pass Program (see ALTEC)

REL Midwest <http://www.learningpt.org/> (see NCREL and Learning Point Associates)

RCET-SW – Regional Consortium for Education and Technology Southwest

<http://associations.missouristate.edu/rcet/>

This consortium serves a group of public schools, colleges and universities in Greene County and the surrounding area with the goal to assist educators in this area to use technology to its full advantage for the enhancement of instruction. Services include the annual **Southwest Education and Technology Conference/Technology Expo**.

RPDCs – Regional Professional Development Centers

<http://dese.mo.gov/divteachqual/leadership/rpdc/index.html>

The nine statewide RPDCs provide high-quality professional development opportunities to Missouri educators, primarily in the form of workshops, technical assistance, and consulting on topics related to curriculum, assessment, and technology integration.

R*TECs – Regional Technology in Education Consortia <http://www.rtec.org>

Operated by the U.S Department of Education (ED) in 1995-2005, the Regional Technology in Education Consortia (R*TEC) provided regional support focused on helping states, districts, schools, and others educational institutions implement advanced technologies. The program primarily provided professional development, technical assistance, and resources to support technology integration within the K-12 classroom. In 2005, money allocated to the R*TECs was diverted to a larger ED initiative, Comprehensive Centers.

- **Technology in Education Resource Center** <http://www.rtec.org>
Along with a summary of the more than 200 resources developed by the R*TECs, this site also provides contact information and web-links to the ten original R*TECS.
- **Comprehensive Centers Network** <http://www.ccnetwork.org/home.html>
A network of 15 Comprehensive Centers to work primarily with states, local education agencies, tribes, schools and other recipients of funds under the No Child Left Behind Act.

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SETDA – State Educational Technology Directors Association <http://www.setda.org/>

The principal association representing the state directors for educational technology, SETDA helps promote national leadership in educational technology to support lifelong learning. Programs and services include professional development in educational leadership for its members and outreach and advocacy to build partnerships that advance learning opportunities. The SETDA website provides public access to various ed-tech reports, research, and toolkits – and links to states' ed-tech departments and related resources.

- **Title II.D summary reports** <http://www.setda.org/web/guest/reports>
SETDA releases annual reports on Title II.D program activities and outcomes in the 50 states and District of Columbia: the National Trends Report and individual State Reports.

SMCAA – Show-Me Curriculum Administrator's Association – <http://smcaa.org/>

The SMCAA mission is to identify and share successful curriculum and instructional strategies and provide a network framework for Missouri administrators working with curriculum.

*** Show-Me TechKnowledge Committee**

Since 2001, teams of Missouri educators help organize Show-Me TechKnowledge Day, held in the Missouri State Capitol Rotunda, to recognize students and teachers who use technology to advance learning and improve student achievement in Missouri public schools. Committee members also work with the Governor's Office to proclaim a Missouri Student Technology Week.

Southwest Education and Technology Conference/Technology Expo (see RCET-SW)

<http://associations.missouristate.edu/rcet/conference.htm>

Sponsored by RCET-SW and Missouri State University, this annual conference provides pre-conference sessions, breakout sessions, and a technology exposition to showcase the latest and greatest in technology for classrooms today.

STARR – Select Teachers as Regional Resources

<http://www4.semo.edu/RPDC/STARR/STARR.htm>

The STARR program is built on the concept of teachers teaching teachers, which enhances its effectiveness. STARR teachers help their colleagues throughout the state learn the latest and most practical techniques for promoting active, hands-on learning by students in all subject areas.

*** SuccessLink** <http://www.successlink.org/>

Funded through DESE and other public and private funds, SuccessLink disseminates and promotes best teaching practices throughout Missouri. SuccessLink programs center around proven practices, curriculum and technology initiatives, and hosting of a Missouri teaching jobs website and teacher mentoring blog community.

- **Great Teaching Ideas database** <http://www.successlink.org/curriculum/>
This site provides free access to useful lesson plans and teaching activities that are searchable and aligned to the Show-Me Standard and Grade Level Expectations. Missouri teachers submit units for review, with approved lessons posted for all teachers to use with their own curricula.
- **Technology Initiatives** <http://www.successlink.org/technology/>
SuccessLink's **Technology Innovations Conference** features hands-on experiences as teachers learn to use technologies, such as SMART Boards, handhelds, scientific probes, WebQuests, blogging, and podcasting, to improve student learning and assist with administrative tasks and responsibilities.

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Title II.D Ed-Tech Program (see EETT and DESE Instructional Technology)

TNP – Technology Network Program for Missouri K-12 Schools (see MOREnet)
<http://www.more.net/programs/k12tnp/>

TSW – Technology Solutions that Work Resource (see What Works Clearinghouse)
<http://www.metiri.com/techsolutions/>

Missouri educators have access to Technology Solutions that Work (TSW) – a suite of online databases that provide users with information on the efficacy of content area software and tech-based learning solutions. Email instrtech@dese.mo.gov to request access privileges.

U.S. Department of Education (ED) <http://www.ed.gov>

ED provides and/or supports a variety of ed-tech programs and resources.

- **Ed-Tech Program – Performance** <http://www.ed.gov/programs/edtech/performance.html>
List of annual performance reports, Government Performance and Results Act (GPRA) Indicators, success stories, promising practices.
- **Ed-Tech Program – Reports** <http://www.ed.gov/about/offices/list/os/technology/techreports.html>
List of the most requested ED publications concerning educational technology.
- **National Center for Education Statistics (NCES)** <http://nces.ed.gov/>
Located within ED and the Institute of Education Sciences, NCES is the primary federal entity for collecting and analyzing data related to education.
- **School 2.0 Website** <http://etoolkit.org/etoolkit/>
This site, designed to help schools develop a common education vision supported by technology, includes self-reflection tools, bandwidth planner, and other resources for organizing a technology integration process.
- **Office of Educational Technology** <http://www.ed.gov/about/offices/list/os/technology/index.html>
OET coordinates development and implementation of ED's technology policies and research, including the National Educational Technology Plan.
- **WWC – What Works Clearinghouse** <http://ies.ed.gov/ncee/wwc/> (see TSW)
Established by ED's Institute of Education Sciences to provide educators, policymakers, researchers, and the public with a central and trusted source of scientific evidence of what works in education.

WWT -- World Wide Technology, Inc. <http://wwt.com>

WWT serves as the prime vendor / administrator of Missouri's state vendor contract, awarded through a competitive process.

APPENDIX: DESE INSTRUCTIONAL TECHNOLOGY REPORTS

The Missouri Education Technology Strategic Plan is one of several documents that examine the use and effectiveness of education technologies in Missouri. Other evaluation information can be found in the annual Census of Technology reports, end-of-year program summary reports, grant project descriptions, eMINTS Program research reports, and a series of *Newsline* articles. Below is a listing of some of the major documents and resources. For more information on the Title II.D Ed Tech Program contact the Instructional Technology section by telephone at 573-751-8247, by email at instrtech@dese.mo.gov, or visit our website at <http://dese.mo.gov/divimprove/instrtech/>.

DESE Education Technology website

<http://dese.mo.gov/divimprove/intstrtech/>

- **Census of Technology (COT) – State Summary Report**

<http://dese.mo.gov/divimprove/instrtech/statefunded/census/>

The Department conducts an annual Census of Technology to track districts' education technology efforts. Begun in 1997 to assess the Technology Network Program (TNP) and state Technology Acquisition Grant (TAG) program, the census has been revised a number of times to align items with state technology plans, Title II.D and other federal or state education technology program goals, and data collection tools developed by the State Educational Technology Directors Association (SETDA), the Performance-Based Data Management Initiative (PBDMI), the National Educational Technology Trends Study (NETTS), and the Education Data Exchange Network (EDEN). Census data are collected in April, processed and analyzed during the summer, and reported in a state summary report in late summer.

- **Core Data Manual Instructions – COT Glossary of Terms**

<http://dese.mo.gov/divimprove/instrtech/COT/Census%20Instructions%20index.html>

The Core Data manual details instructions for completing the Census of Technology (COT) – screens 30 and 31 – and includes definitions for key terms such as: technology integration, student technology literacy, teacher technology skill proficiency, and more.

- **District Planning Resources**

<http://dese.mo.gov/divimprove/instrtech/techplan/>

This website provides resources for local planning efforts, such as the Six-step Process in Creating a Technology Plan, instructions for submitting a plan for state approval, criteria for state approval, tips on how to tie technology plans to comprehensive school improvement plans, and links to district plans with exemplary components.

- **Grant Program Websites**

Program websites provide links to administrative manuals, grant-writing hints, descriptions of funded projects, and supplemental information such as research and other resources.

Title II.D Enhancing Education through Technology (federal program)

<http://dese.mo.gov/divimprove/instrtech/federalfunded/TitleIID/>

METS School Grants (state program)

<http://dese.mo.gov/divimprove/instrtech/METS%20School%20Grant%20Pgrm/>

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- **eMINTS Evaluation Reports**

<http://www.emints.org/evaluation/index.shtml>

Missouri's Instructional Networked Teaching Strategies (eMINTS) program supports educators as they integrate multimedia technology into inquiry-based, student-centered, interdisciplinary, collaborative teaching practices that result in higher levels of student performance (as determined in extensive research conducted by external evaluators). Federal grant program funds, including Title I and Title II.D, have been used to conduct additional research efforts. Grant recipients are required to conduct extensive evaluation of their competitive Title II.D grant implementations; recipients are expected to set aside up to 5% of their grants with which to conduct evaluation of their local projects.

- **SETDA – Trends Reports and State Profiles**

<http://www.setda.org/web/guest/reports> and
<http://www.setda.org/web/guest/individualstateprofile>

State ed-tech directors complete an annual state summary of Title II.D program implementations. The national trend reports summarize the annual findings, discuss existing and emerging trends, and describe successful practices and district projects from across the nation. State Profiles provide state-specific summaries of select data.